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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/989,362	11/20/2001	Mark Auch	12406-060US1/P2002,0611	1107
26181	7590	05/18/2005	U	
FISH & RICHARDSON P.C. PO BOX 1022 MINNEAPOLIS, MN 55440-1022			EXAMINER CLARK, JASMINE JHIHAN B	
			ART UNIT 2815	PAPER NUMBER

DATE MAILED: 05/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/989,362

Applicant(s)

MARK AUCH ET AL.

Examiner

Jasmine J. Clark

Art Unit

2815

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04/01/05.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-68 is/are pending in the application.
- 4a) Of the above claim(s) 34-55 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 56-68 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 12/1, 13/1, 14-16, 18-21, 23-26, 28-31 is/are rejected.
- 7) ☒ Claim(s) 3-11, 12/2-12/11, 13/2-13/11, 17, 22, 27, 32 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/17/04, 04/01/05, 10/15/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Election/Restrictions

1. Claims 34-55 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Group II, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 04/01/05.
2. It is suggested that Applicants cancel claims 34-55 in response to the Office action.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 12/1, 13/1, 14(12/1), and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Shimizu et al. (US 5,552,914), Applicants' submitted prior art.

Shimizu shows in Fig. 3, a device, comprising a substrate 111 with a device region defined thereon; an active component (area of 113 and 115) on a surface of the substrate in the device region; a cap 110 mounted on the substrate 111 to form a package, the cap creates a cavity over the device region to seal the active component; and a spacer particles 117 fixed to the active component, the spacer particles 117 of a non-conductive material (see column 5, lines 5-6) prevent the cap 110 from contacting the active component.

Concerning claims 12/1 and 13/1, wherein the spacer particles are randomly distributed in the active region, occupying both active and non-active regions, please see Fig. 3.

Concerning claims 14 (12/1), and 24 wherein the spacer particles comprise a spherical, please see Fig. 3.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 15, 16, 18-21, 23, 25, 26, 28-31, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimizu et al. (US 5,552,914), Applicants' submitted prior art.

While a mean of diameter and a density of the spacer particles to maintain a height of the cavity between the cap and substrate and/or to maintain the cavity are not clearly taught, they are inherently present or certain would have been obvious to include the spacer particles between the cap and the substrate, as is very well known.

As per the above discussion the applied reference teaches employing the space particles of the spherical shape, but fails to teach wherein the spacer particles comprises a non-spherical shape. . It would have been an obvious design choice bounded by well known manufacturing constrains and ascertainable by routine experimentation and optimization to choose particular dimensions or shape because applicants have not disclosed that the dimensions or the shape are for a particular unobvious purpose, produce an expected result, or are otherwise critical, and it appears prima facie that the process would posses utility using another dimension or shape. See, for example, *In re Rose*, 220 F. 2d 459, 105 USPQ 237 (CCPA 1955).

Allowable Subject Matter

5. Claims 3-11, 12/2-12/11, 13/2-13/11, 17, 22, 27, and 32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The applied reference fails to teach and/or suggest the limitations as set forth in claims as shown above.

6. Claims 56-68 are allowed.

The following is an examiner's statement of reasons for allowance: the applied reference further teach a sealing dam 116 surrounding the device region; but fails to teach including an adhesive located in the sealing resin region, the adhesive hermetically sealing the device, wherein the sealing dam reduces a sealing width of the device.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Telephone Inquiry Contacts

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jasmine J. Clark whose telephone number is (571) 272-1726. The examiner can normally be reached on Flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Thomas can be reached on (571) 272-1664. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2815

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jjbc/05/14/05

JASMINE CLARK
PRIMARY EXAMINER

A handwritten signature in cursive script, appearing to read 'Jasmine Clark', is written below the printed name and title.